GOVERNMENT OF INDIA
PLANNING
LOK SABHA

UNSTARRED QUESTION NO:1521
ANSWERED ON:04.03.2016
Survey on Hydro Power Projects
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Will the Minister of PLANNING be pleased to state:

(a) whether the National Institute for Transforming India (NITI) Aayog has recently conducted a survey on help up hydro-power projects across the country in which a large amount have been invested;
(b) if so, the details and findings thereof;
(c) whether the country is lagging behind in generation of additional hydro power as set target during the 12th Five Year Plan;
(d) whether the policy measures chalked out the Government have failed to streamline the hydro power sector; if so, the reasons therefor; and
(e) the action plan prepared by the Government to energize the sector?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR MINISTRY OF PLANNING
AND MINISTER OF STATE FOR DEFENCE
RAO INDERJIT SINGH

a) No, Madam.

b) Does not arise;

c) A hydro capacity addition of 10,897 MW (6004 MW in Central Sector, 1608 MW in State Sector and 3285 MW in Private Sector) is programmed for the 12th Plan (2012-17).

Out of this, hydro projects with aggregate installed capacity of 3731 MW have been commissioned and 7166 MW is under various stages of construction for benefits during remaining period of 12th Plan and beyond. Sector wise details are as under:

Sector	Commissioned (MW)	Under Execution (MW)	Total (MW)
Central Sector	2464	3540	6004
State Sector	672	936	1608
Private Sector	595	2690	3285
Total:	3731	7166	10897

Based on the current status of works, out of the 12th Plan hydro capacity addition target of 10897 MW, capacity aggregating to 4371 MW is slipping from 12th Plan and 930 MW capacity is critical for commissioning during 12th Plan. Further, hydro capacity of 229 MW is likely to advance from outside the 12th Plan Programme. Thus, based on the current status of the projects, the likely capacity addition during 12th Plan is 6755 MW (6526 MW from Plan & 229 MW from outside Plan). The details are enclosed at Annex-I.

The major reasons of slippages for the projects slipping from 12th Plan is enclosed at Annex-II.

d) & e) The Government has taken a number of policy measures to give a boost to the development of hydro power in the country. The details are given below:

1. National Electricity Policy, 2005:

The policy lays maximum emphasis on full development of the feasible hydro potential in the country which will facilitate economical development of States, particularly North Eastern States, Uttarakhand, Himachal Pradesh and Jammu & Kashmir. Since the hydel projects call for comparatively larger capital investment, debt financing of longer tenure has been recommended. The State Governments have been advised to review procedure for land acquisition and other approvals / clearances for speedy implementation of hydro projects. Full support of Central Government has been extended for hydel development by offering the services of CPSUs like NHPC, NEEPCO, SJVNL, THDC etc.

2. Hydro Power Policy, 2008 - Salient Features (including subsequent changes):

Hydro Power Policy, 2008 has been notified by Government of India on 31.3.2008. The salient features of the policy are given below:

â€¢ Transparent selection criteria for awarding sites to private developers.
â€¢ As notified in Revised Tariff Policy, 2016, Cost plus Tariff regime (in which tariff is to be determined by the regulator under section 62 of Electricity Act, 2003) has been extended for public & private sector hydro power projects up to 15.08.2022.

â€¢ Enables developer to recover his additional costs through merchant sale of upto a maximum of 40% of the saleable energy.
â€¢ Developer to provide 100 units of electricity per month to each Project Affected Family in cash or kind or a combination of both for 10 years from the date of commissioning.
â€¢ Developer to assist in implementing rural electrification in the vicinity of the project area & contribute 10% share of the State Government under the Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme.
â€¢ Additional 1% free power from the project (over and above 12% free power earmarked for the host State) for Local Area Development Fund - regular revenue stream for welfare schemes, creation of additional infrastructure and common facilities.
â€¢ The State Governments to contribute a matching 1% from their share of 12% free power.

3. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013:

Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 has been notified by the Government of India on 27.09.2013 which have more participation of local people in terms of Land acquisition and Rehabilitation & Resettlement. The main objectives of the Act are given below:

â€¢ To ensure a humane, participative, informed and transparent process for land acquisition with the least disturbance to the owners of the land and other affected families.
â€¢ Provide just and fair compensation to the affected families whose land has been acquired or proposed to be acquired or are affected by such acquisition.
â€¢ Make adequate provisions for such affected persons for their rehabilitation and resettlement.
â€¢ Ensure that affected persons become partners in development leading to an improvement in their post-acquisition social and economic status.

4. Revised Tariff Policy, 2016:

Revised Tariff Policy has been notified by the Government of India on 28.01.2016. The following provisions including others in respect of hydro power have been made:

â€¢ Promote Hydro Electric Power generation including Pumped Storage Projects to provide adequate peaking reserves, reliable gird operation and integration of variable renewable energy sources.
â€¢ The developer of hydroelectric project including Pumped Storage Project would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term Power Purchase Agreements (PPAs) on the basis of performance based cost of service regulation if concurrence of Central Electricity Authority (if required under section 8 of the Act), financial closure, award of work and long term PPA (of the duration of 35 years or more) with distribution licensees are completed by 15.08.2022.
â€¢ The Appropriate Commission shall provide for suitable regulatory framework for incentivizing the developers of Hydro Electric Projects (HEPs) including Pumped Storage Projects for using long term financial instruments in order to reduce the tariff burden in initial years.

5. A number of other measures have also been taken for increasing the hydro capacity:

â€¢ A Consultation Process has been evolved for fast tracking of Survey & Investigation activities and preparation of Quality Detailed Project Reports (DPRs) wherein appraising agencies advise Developer in carrying out various investigations and firming up the project layout etc.
â€¢ Time bound appraisal norms have been evolved in Central Electricity Authority for examination of DPRs.
â€¢ A number of projects have been prioritized which are being monitored regularly at highest levels by the Government of India for their expeditious implementation.
â€¢ CEA is monitoring the progress of each project regularly through frequent site visits, interaction with the developers and critical study of monthly progress reports.
â€¢ A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power to independently follow up and monitor the progress of the hydro projects.
â€¢ Regular review meetings are taken by Ministry of Power/ CEA with equipment manufacturers, State Utilities/ CPSUs/ Project developers, etc. to sort out the critical issues.
â€¢ Review meetings are taken by Ministry of Power/ CEA with Border Road Organization, Ministry of Road Transport and Highways etc. to sort out the infrastructure issues.

As a result of the initiatives taken by Government, a large of number entrepreneur have come forward and invested in hydroelectric projects allotted to them by various State Governments. The pace of hydro development in the country is however slow due to various issues involved in hydro development which include 1) Environmental and forest clearances, 2) rehabilitation and resettlement issues, 3) land acquisition, 4) law and order problems and local issues, 5) geological surprises, 6) long gestation period, 7) inter-State issues, 8) natural calamities etc.